

10/518039

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

09 DEC 2004

(43) International Publication Date
18 December 2003 (18.12.2003)

PCT

(10) International Publication Number
WO 03/104438 A2

- (51) International Patent Classification⁷: **C12N**
- (21) International Application Number: **PCT/US03/19741**
- (22) International Filing Date: **10 June 2003 (10.06.2003)**
- (25) Filing Language: **English**
- (26) Publication Language: **English**
- (30) Priority Data:
60/388,075 **11 June 2002 (11.06.2002)** **US**
- (71) Applicant (*for all designated States except US*): **AVALON PHARMACEUTICALS, INC.** [US/US]; 20358 Seneca Meadows Parkway, Germantown, MD 20876 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (*for US only*): **YOUNG, Paul, E.** [US/US]; 207 Beckwith Street, Gaithersburg, MD 20870 (US). **EBNER, Reinhard** [US/US]; 9906 Shelburne Terrace #316, Gaithersburg, MD 20878 (US).
- (74) Agents: **GRANT, Alan, J.** et al.; Carella, Byrne, Bain, Gilfillan, Cecchi, Stewart & Olstein, 6 Becker Farm Road, Roseland, NJ 07068 (US).
- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:**
— *without international search report and to be republished upon receipt of that report*
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: **CANCER-LINKED GENE AS TARGET FOR CHEMOTHERAPY**

(57) Abstract: Cancer-linked gene sequences, and derived amino acid sequences, are disclosed along with processes for assaying potential antitumor agents based on their modulation of the expression of these cancer-linked genes. Also disclosed are antibodies that react with the disclosed polypeptides and methods of using the antibodies to treat cancerous conditions, such as by using the antibody to target cancerous cells *in vivo* for purposes of delivering therapeutic agents thereto. Also described are methods of diagnosing using the gene sequences.

WO 03/104438 A2